

What is claimed is:

1 A merchandise transaction method on on-line shopping in an on-line shopping system, comprising:

5 a first step in which an intermediary receives information about an electronic mall keeper to which a user desires transaction, information about commodities to be purchased by said user, and a packet and executes an order and payment of commodities to an electronic mall keeper in behalf of
10 said user; and
a second step in which said intermediary receives a secret decryption key for said packet transmitted from said user in exchange of said commodities and then obtains a credit card number of said user by
15 deciphering the packet cipher.

2 A merchandise transaction method on on-line shopping in an on-line shopping system, comprising:

20 at a first transaction between a user which desires to purchase commodities and an intermediary, a first step in which an intermediary receives information about an electronic mall keeper to which said user desires transaction, information about commodities to be purchased by said user, and a packet and executes
25 an order and payment of commodities to an electronic

mall keeper in behalf of said user;

a second step in which said intermediary receives a secret decryption key for said packet transmitted from said user in exchange of said commodities and then obtains a credit card number of said user by deciphering the packet cipher;

a third step in which said intermediary records a credit card number of said user acquired through decryption of said packet;

at the second or later transaction between said user which desires to purchase commodities and said intermediary, a fourth step in which said intermediary receives information about an electronic mall keeper to which said user desires transaction and information about commodities to be purchased by said user and then executes an order and payment of said commodities to an electronic mall keeper in behalf of said user; and

a fifth step in which said intermediary acquires a credit card number of said user based on the record in said third step.

3 A merchandise transaction method in an on-line shopping system, comprising:

a user merchandise ordering step in which a user orders

commodities by transmitting information about a
desired electronic mall keeper and information about
commodities to be purchased to an intermediary;
a packet transmission step in which said user transmits
5 a packet regarding the merchandise order in the
previous step to said intermediary;
an intermediary merchandise ordering step in which said
intermediary orders commodities by specifying itself
as a merchandise shipping destination to said
10 electronic mall keeper, based on the information
received in the previous step;
a credit card number notification step in which said
intermediary notifies said electronic mall keeper of
a credit card number of said intermediary;
15 an electronic mall keeper merchandise shipping step in
which said electronic mall keeper ships said
commodities to said intermediary;
an intermediary merchandise shipping step in which said
intermediary ships said commodities to said user;
20 a secret decryption key transmission step in which said
user transmits a secret decryption key for said
packet to said intermediary, in exchange of the
commodities received in the previous step; and
a cash and commission receiving step in which said
25 intermediary acquires a credit card number by

deciphering the previously received packet cipher with the secret decryption key acquired in the precious step and then receives a cash and commission of the commodities with the credit card number.

5

4 A merchandise transaction method on on-line shopping in an on-line shopping system, comprising:

- 10 a transaction-count decision step of deciding whether or not a transaction between a user which wants to purchase a commodity and an intermediary is for the first time;
- 15 a user merchandise ordering step in which said user orders the commodity by transmitting information about an electronic mall keeper desired by said user and information about a commodity to be purchased to said intermediary when it is decided that the transaction between said user and said intermediary is for the first time in the previous step;
- 20 an intermediary merchandise ordering step in which said intermediary orders the commodity by specifying itself as a merchandise shipping destination to an electronic mall keeper, based on the sets of information received in the previous step;
- 25 a credit card number notification step in which said intermediary notifies the credit card number of said

intermediary to said electronic mall keeper at the first transaction between the user and the intermediary;

an electronic mall merchandise shipping step in which
5 said electronic mall keeper ships said commodity to said intermediary at the first step between said user and said intermediary;

an intermediary merchandise shipping step in which said
10 intermediary ships said commodity to said user at the first step between said user and said intermediary;

a secret decryption key transmission step in which said
user transmits said secret decryption key for the packet to said intermediary, in exchange of the commodity received in the previous step;

15 a cash and commission receiving step in which said intermediary acquires the credit card number by deciphering the cipher of said packet received in the previous step with the secret decryption key acquired in the previous step and then receives a cash and
20 commission for said commodity with said credit card number;

a credit card number recording step in which said
intermediary records corresponding information for the purpose of the second or later transaction to
25 said user, said corresponding information being used

to uniquely identify said user with the credit card number of said user obtained in the previous step;

a second or later transaction user merchandise ordering step in which said user orders the commodity by transmitting information about a desired electronic mall keeper and information about a desired commodity to said intermediary when it is decided that a transaction between the user and the intermediary is the second time or later in the previous step;

a second or later transaction intermediary merchandise ordering step in which said intermediary orders said commodity by specifying said user as a merchandise shipping destination to said electronic mall keeper, based on the information received in the previous step;

a second or later transaction credit card number notification step in which said intermediary notifies the credit card number of said intermediary to said electronic mall keeper at the second or later transaction between the user and the intermediary;

a second and later transaction electronic mall keeper merchandise shipping step in which said electronic mall keeper ships said commodity to said user at the second or later transaction between said user and said intermediary;

a merchandize arrival notification step in which said user, which has received said commodity in the previous step, notifies said intermediary of arrival of said commodity; and

5 a second or later transaction cash and commission receiving step in which said intermediary receives a cash and commission of said commodity with the credit card number of said user recorded in the previous step at the second or later transaction between said
10 user and said intermediary.

5 An intermediary information processing system which intermediates between a user and an electronic mall keeper in an on-line shopping system, comprising

15 a merchandise order receiver for receiving an order of a commodity from a user, said commodity order including information about a desired electronic mall keeper and information about a commodity to be purchased;

20 a packet receiver for receiving a packet transmitted by said user in the merchandise order by said merchandize order receiver;

a merchandize order transmitter for ordering said commodity by specifying said intermediary as a
25 merchandise shipping destination to said electronic

mall keeper, based on information received by said merchandise order receiver;

a credit card number notifier for notifying said electronic mall keeper of the credit card number of said intermediary to pay for a merchandise order by said merchandise order transmitter;

a merchandize receiver for receiving the commodity shipped by said electronic mall keeper;

a merchandize shipper for shipping the commodity received by said merchandise receiver to said user;

a secret decryption key receiver for receiving a secret decryption key transmitted from said user, in exchange of reception of the commodity; and

a cash/commission receiver for acquiring a credit card number by deciphering the packet cipher with the secret decryption key received by said secret decryption key receiver and then receiving a cash and commission of the commodity with the credit card number.

6 An intermediary information processing system which intermediates between a user and an electronic mall keeper in an on-line shopping system, comprising:

a transaction-count decider for deciding whether or not

a transaction to a user which wants to purchase a

commodity is for the first time;

a merchandise order receiver for receiving an order of
a commodity from a user, said commodity order
including information about a desired electronic mall
keeper and information about a commodity to be
5 purchased;

a packet receiver for receiving a packet transmitted by
said user in the merchandise order by said
merchandize order receiver when said transaction-
count decider decides that the transaction to said
10 user is for the first time;

a merchandize order transmitter for ordering said
commodity to said electronic mall keeper, based on
information received by said merchandise order
15 receiver, by specifying said intermediary as a
merchandise shipping destination when said
transaction-count decider decides that the
transaction to said user is for the first time or by
specifying said user as a merchandise shipping
20 destination when said transaction-count decider
decides that the transaction to said user is not for
the first time;

a credit card number notifier for notifying said
electronic mall keeper of the credit card number of
25 said intermediary to pay for a merchandise order by

said merchandise order transmitter;

a merchandize receiver for receiving the commodity

shipped by said electronic mall keeper, with said intermediary as a merchandise shipping destination;

5 a merchandize shipper for shipping the commodity

received by said merchandise receiver to said user;

a secret decryption key receiver for receiving a secret

decryption key transmitted from said user, in

exchange of reception of the commodity when said

10 transaction-count decider decides that the

transaction to said user is for the first time;

an initial cash/commission receiver for acquiring a

credit card number by deciphering the packet cipher

with the secret decryption key received by said

15 secret decryption key receiver and then receiving a

cash and commission of the commodity with the credit card number;

a credit card number recorder for recording

corresponding information to pay for the second or

20 later transaction to said user when said transaction-

count decider decides that the transaction to said

user is for the first time, said corresponding

information being used to uniquely identify said user

with the credit card number of said user acquired by

25 said initial cash/commission receiver;

a merchandise arrival notification receiver for receiving notification of arrival of the commodity dispatched from said electronic mall keeper to said user when said transaction count decider decides that the transaction to said user is not for the first time; and

a second or later transaction cash/commission receiver for receiving a cash and commission for the commodity with the credit card number of said user recorded by said credit card number recorder when said transaction count decider decides that the transaction to said user is not for the first time.

7 A recording medium on which a program is recorded, wherein said program realizes an intermediary information processing system which intermediates between a user and an electronic mall keeper in an on-line shopping system as functions including:

a merchandise order receiver for receiving an order of a commodity from a user, said commodity order including information about a desired electronic mall keeper and information about a commodity to be purchased;

a packet receiver for receiving a packet transmitted by said user in the commodity order by said merchandize

order receiver;

a merchandize order transmitter for ordering said commodity by specifying said intermediary as a merchandise shipping destination to said electronic mall keeper, based on information received by said merchandise order receiver;

a credit card number notifier for notifying said electronic mall keeper of the credit card number of said intermediary to pay for the commodity order by said merchandise order transmitter;

a merchandize receiver for receiving the commodity shipped by said electronic mall keeper;

a merchandize shipper for shipping the commodity received by said merchandise receiver to said user which ordered said commodity;

a secret decryption key receiver for receiving said secret decryption key transmitted from said user, in exchange of reception of the commodity; and

a cash/commission receiver for acquiring a credit card number by deciphering the packet cipher with the secret decryption key received by said secret decryption key receiver and then receiving a cash and commission for the commodity with the credit card number.

8 A recording medium on which a program is recorded,
wherein said program realizes an intermediary information
processing system which intermediates between a user and
an electronic mall keeper in an on-line shopping system as
5 functions including:

a transaction-count decider for deciding whether or not
a transaction to a user which wants to purchase a
commodity is for the first time;

10 a merchandise order receiver for receiving an order of
a commodity from a user, said commodity order
including information about a desired electronic mall
keeper and information about a commodity to be
purchased;

15 a packet receiver for receiving a packet transmitted by
said user in the merchandise order by said
merchandise order receiver when said transaction-
count decider decides that the transaction to said
user is for the first time;

20 a merchandise order transmitter for ordering said
commodity to said electronic mall keeper, based on
information received by said merchandise order
receiver, by specifying said intermediary as a
merchandise shipping destination when said
transaction-count decider decides that the
25 transaction to said user is for the first time or by

specifying said user as a merchandise shipping destination when said transaction-count decider decides that the transaction to said user is not for the first time;

- 5 a credit card number notifier for notifying said electronic mall keeper of the credit card number of said intermediary to pay for a merchandise order by said merchandise order transmitter;
- 10 a merchandize receiver for receiving the commodity shipped by said electronic mall keeper, with said intermediary as a merchandise shipping destination;
- a merchandize shipper for shipping the commodity received by said merchandise receiver to said user which ordered said commodity;
- 15 a secret decryption key receiver for receiving said secret decryption key transmitted from said user, in exchange of reception of the commodity when said transaction-count decider decides that the transaction to said user is for the first time;
- 20 an initial cash/commission receiver for acquiring a credit card number by deciphering the packet cipher with the secret decryption key received by said secret decryption key receiver and then receiving a cash and commission of the commodity with the credit
- 25 card number;

a credit card number recorder for recording
corresponding information for the purpose of the
second or later transaction when said transaction-
count decider decides that the transaction to said
5 user is for the first time, said corresponding
information being used to uniquely identify said user
with the credit card number of said user acquired by
said initial cash/commission receiver;

a merchandise arrival notification receiver for
10 receiving notification of arrival of the commodity
dispatched from said electronic mall keeper to said
user when said transaction-count decider decides that
the transaction to said user is not for the first
time; and

15 a second or later transaction cash/commission receiver
for receiving a cash and commission for the commodity
with the credit card number of said user recorded by
said credit card number recorder when said
transaction-count decider decides that the
20 transaction to said user is not for the first time.

9 A recording medium on which a control program is stored,
wherein said control program controls an information
processing system of an intermediary which intermediates
25 between a user and an electronic mall keeper in an on-line

shopping system, said control program making said information processing device execute the following steps of:

- 5 receiving a merchandise order including information about a desired electronic mall keeper and information about an item to be purchased from a user;
- receiving a packet transmitted from said user in said merchandise order;
- 10 ordering an item by specifying an intermediary as a merchandise shipping destination to said electronic mall keeper, based on the information about said merchandise order;
- notifying said electronic mall keeper of a credit card
- 15 number of said intermediary to pay for said merchandise order;
- receiving a secret decryption key transmitted from said user, in exchange of the ordered item; and
- acquiring the credit card number by deciphering the
- 20 packet cipher with the secret decryption key and then receiving a cash and commission of said item with the credit card number.

10 A recording medium on which a control program is

25 stored, wherein said control program controls an

information processing system of an intermediary which intermediates between a user and an electronic mall keeper in an on-line shopping system, said control program making said information processing device execute the following

5 steps of:

deciding whether or not a transaction to a user which
wants to purchase an item is for the first time;

receiving a merchandise order from a user, said
merchandise order including information about a
10 desired electronic mall keeper and information about
an item to be purchased;

receiving a packet transmitted by said user in the
merchandise order when it is decided that the
transaction to said user is for the first time;

15 ordering said item to said electronic mall keeper,
based on information about said received merchandise
order, by specifying said intermediary as a
merchandise shipping destination when it is decided
that the transaction to said user is for the first
20 time or by specifying said user as a merchandise
shipping destination when it is decided that the
transaction to said user is not for the first time;

notifying said electronic mall keeper of the credit
card number of said intermediary to pay for said
25 merchandise order;

receiving a secret decryption key transmitted from said user, in exchange of reception of the item when it is decided that the transaction to said user is for the first time;

- 5 acquiring a credit card number by deciphering the packet cipher with the received secret decryption key and then receiving a cash and commission for the item in the first transaction with the credit card number;
- 10 recording corresponding information for the second or later transaction to said user when it is decided that the transaction to said user is for the first time, said corresponding information being used to uniquely identify said user with the credit card number of said user acquired in said first
- 15 transaction;
- receiving notification of arrival of the item dispatched from said electronic mall keeper to said user when it is decided that the transaction to said user is not for the first time; and
- 20 receiving a cash and commission for the item with the recorded credit card number of said user when it is decided that the transaction to said user is not for the first time.